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Excess recurrent cardiac events in rheumatoid arthritis patients with acute coronary syndrome

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Background: Cardiovascular mortality is increased in rheumatoid arthritis. Possible reasons include an increased incidence of ischaemic heart disease or worse outcome after acute coronary syndrome (ACS).

Objectives: To assess the outcome of ACS in rheumatoid arthritis compared with case matched controls in the context of underlying cardiac risk factors, clinical presentation, and subsequent management.

Methods: 40 patients with rheumatoid arthritis and ACS identified from coronary care admission registers between 1990 and 2000 were case matched as closely as possible for age, sex, classical cardiovascular risk factors, type and severity of ACS, and admission date (± 3 months) with 40 controls. A standardised proforma was used for detailed case note review.

Results: Age, sex, other cardiovascular risk factors, and type and severity of presenting ACS were not significantly different between cases and controls. Recurrent cardiac events were commoner in rheumatoid arthritis (23/40, 57.5%) than controls (12/40, 30%) ($p = 0.013$); there were 16/40 deaths in rheumatoid arthritis (40%) v 6/40 (15%) in controls ($p = 0.012$). Recurrent events occurred earlier in rheumatoid arthritis (log rank survival, $p = 0.05$). Presentation with chest pain occurred in all controls compared with 33/40 rheumatoid patients (82%) ($p = 0.006$); collapse occurred in one control (2.5%) v 7/40 rheumatoid patients (17.5%) ($p = 0.025$). Treatment during the ACS was not significantly different in the two groups.

Conclusions: Recurrent ischaemic events and death occur more often after ACS in rheumatoid arthritis. Atypical presentation is commoner in rheumatoid arthritis. There is an urgent need to develop identification and intervention strategies for ACS specific to this high risk group.

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